No 34

No. 5

Inaugural Dissertation

on

Bilious Fever

by

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of Philadelphia

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There is no science exhibits more strongly the evils of error than that of Medicine; It has always been a subject of popular attention, whilst the slow unfolding of its Mysteries has served to divert inquiry from the sure delays of observation, to the easier but unsuccessful work of imagination; From the days of Hippocrates, the world have often been attracted by the splendid fabrics, reared to Medical Science; each spectator has marked his favourite, many have paused to admire the fanciful decorations of the Architect, but all have passed on in pursuit of that Temple whose structure is ornamented with the untiring graces of Truth. It is the character of every infant science to be guided, less by reason, than imagination — It lives in the labyrinth of speculation, and wanders in its endless uncertainty, until grown old in error, and worn out by its long and prodigal pursuits, it retraces its steps to the unerring paths of observation — He who would court the smiles of knowledge must close his eyes to the allurements of fancy; these offer a reward it is true, but if such reward be his aim, let him rather seek the paths of Poetry and Music, there to be harmlessly gratified with the richest enjoyments of the imagination. Science is a strict, yet merciful Mistress; she commands us to throw away our theoretical prepossessions, and appear

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uncovered in her presence; she requires our exclusive adoration of Nature, and gives us, in reward, the mantle of Truth to protect us from the heavy mists of error.

Where are now those systems of Medicine that once so proudly flourished, and that commanded the attention of many of the eminent cultivators of our Science?— their systems are our lessons, learned— only to be forgotten; and their facts are recorded only to demonstrate the futility of their theories.— Well had it been, if Medicine had always been guided by that light which has shone around her in later years. I allude to Lord Bacon that great ~~[illegible]~~ of Science, (so figured above all men,) whose coming, at once dissipated the clouds of false knowledge hanging over her temples, and pointed out to her votaries the importance of experiment and observation, to save them from destruction,— His penetrating eye soon discovered that Science was travelling an endless course in pursuit of its object,— that the many existing theories were but at the mercy of popular opinion,— He saw that knowledge founded upon fancy, soon fled from the scrutiny of observation,— His powerful hand, whose touch transformed error into truth,

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held not within its grasp the objects of a single science, but with a generosity which ever marks the great and comprehensive mind, lent its aid to every subject of human investigation.— In those sciences which have lately risen from obscurity, the success of the application of his wise and masterly principles are manifest; and in their rapid progress, we behold the proudest monument reared to his genius.

It is not the intention of the writer of this essay to amuse his teachers with theory, nor can he hope to instruct those whose enlarged experience has so frequently brought its subject before their consideration,— It cannot be expected that the youth who has scarcely entered the threshold of the Temple of Medicine, should prescribe rules for its internal oeconomy; but he hopes he has, in attempting to comply with the rules of an institution, a sufficient apology for thus early obtruding upon their notice, the result of a little reading, and a still more limited observation.

He has always endeavoured to avail himself of opportunities to observe disease, humbly believing his observations, far as they extend, to be correct,— he has

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never enslaved himself with the prejudice of theory, and regrets that his gratitude for the important facts he has received from authors in his profession, has been diminished by the recollection of their many misleading conclusions, — his search is after truth in Medicine, and he will be always happy to find it, either at the sick bed of the patient, or in the convincing voice of his instructors.

It is the object of the few following pages to describe the Causes, Symptoms, and mode of Cure, of that State of the System, in which the diseased action of some of its parts, appears above the grade of health, and which in the language of the present system of Nosology is called Bilious Inflamatory Fever, —— It has long been the custom of Medical writers to adopt some general system in treating of diseases, with a view to regulate the mind in its observations, — Dr Sydenham first suggested the arrangement of diseases by certain signs, into Classes, Orders, Genera, and Species, similar to the method adopted by Naturalists, His proposal has been executed by many European writers, — They all differ from each other according

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to various opinions of their authors, and are equally liable to objection. — The nosological system of Cullen has been, and still is, the general text book, for most of the medical thinking and observation, in Great Britain and the United States.

It may be objected to the systems of nosology, that they are unphilosophical, they endeavour to comprehend variable particulars under one general term. Precision of ideas, requires precision of language; and we can find no single word that will convey to the mind a distinct understanding of varying individual symptoms.

Nosology is founded upon too limited an observation of nature; it recognizes the coincidence of certain symptoms, but neglects their many discrepancies: it would shut in within its narrow bounds, the unlimited and uncontrolable phenomena of disease. Its arrangements teach us, that the human body, in a diseased state, sometimes exhibits a monotonous character, that is when a symptom occurs which is at variance with our preconceived notions of a general term, we must insult nature by drawing her, like an intruder, from our presence. — With equal philosophy, do those ancient

nations consider an eclipse of the sun, an anomalous operation of nature, whilst they were ignorant of those laws which govern the motions of the heavenly bodies. It is inverting the order of science to form a theory and shape our facts to coincide with it.— Who but he that views disease in the narrow limits of the present system of Nosology, can assert that the human system in a state of disease ever exhibited an anomaly. The term is only relative to the ignorance, or assumed knowledge, of men.

Let us not then govern our observations in Medicine by a rule that makes no provision for the endless variety and unforseen combination of symptoms that occur. Let us study disease, as exhibited to our senses, and not as it is framed by our imaginations:— let us observe each individual symptom in its various relations, and learn from experience, the remedies calculated to restore the system to its healthy state.

The Causes of Bilious Fever are as various as its symptoms, Marsh exhalations, irregularity in diet, fatigue, exposure to cold and wet after immoderate

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exercise, the extremes of temperature, and its variations, are some of the causes which create this form of disease. It seems to be a law of the human system, that similar causes shall produce, in the same persons, at different times, very opposite results. The causes of this, as of most other diseases are often obscure, and we are insensible of their existence, until their injurious effect is exhibited in disease.

The first feelings of a patient attacked with Bilious fever, are frequently, languor and inability to pursue his usual occupations; he is sensible of alternations of heat and cold throughout his system; as the disease advances, he complains of pain in the back and loins, attended sometimes with giddiness and pain in his head, and a sensation of heaviness about the lower part of the forehead; the temperature of his whole body is much increased, and his pulse becomes hard, quick, full, and frequent, there is a determination of blood to the head; his eyes sometimes appear inflamed, and secrete an unusual quantity of tears; his countenance often betrays considerable anxiety; his respiration is hurried

he sighs frequently, and is restless; he has much thirst; his tongue is dry, and sometimes furred in the middle, with its edges of a red colour; he is attacked with nausea and vomitings of a bilious nature; his bowels though frequently constipated, sometimes discharge a matter of a dark colour and offensive odour; his urine is high coloured, and often small in quantity, creating sometimes both stranguary and burning.—

The symptoms in this, as in most other diseases, exhibit a periodical remission and exacerbation, in which case their violence is sometimes mitigated by a copious flow of sweat; the skin is restored to its natural temperature; the local pains, and general uneasiness in a measure subside; although the wise during the remission often maintains many of its diseased characters.

By this aggregate of symptoms, affecting almost every system of the body, I have endeavoured to describe, according to nosological prescription, some of the phaenomena, supposed to be definitely comprehended under the general name of Bilious fever: a term that

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does not inform us, with practical precision, of the states of the nerves, the Brain, the Muscles, the particular state of the pulse, the countenance, the Stomach, the bowels, and other parts, who can prescribe for a disease by such indefinite nomenclature? for let it be borne in mind that my objections lie principally against the general terms of Nosology.— A system of Medicine founded in observation, should teach us to regard the human system in one disease, as liable to be affected by the symptoms exhibited in many others — It should regard the body as a weak fortress, exposed on every side to the artful ~~[illegible]~~ of its enemies — It should instruct us to watch attentively their silent movements; and should direct us to vary our defence, and apply our forces according to their method of attack.

The Treatment of this form of disease would not depend upon the name, but upon the manifestation of the symptoms, — It has been remarked that an emetic, or a cathartic given in the incipient stage of Bilious Fever, will often destroy it.— If the early symptoms of this disease were peculiar, and if we were figured

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that these premonitory signs invariably preceded the full formed disease; then might we justly declare the remedy suited to the particular case,— But, as the progress of disease is variable, and the early symptoms of one disease are rarely distinguishable from another— How, I ask, shall we obtain a rule to direct us in our researches into futurity, to determine whether disease shall assume one form or another? Observation teaches us, there are many states of the system, where the powerful influence of those remedies, will produce a healthful change; but to declare that they exert a beneficial effect upon the system in one disease alone is an error, which has been overlooked, thro' the blindness of conceit, or the indolence of our observation.

We now come to that violent state of the disease, requiring the most active remedies; Bloodletting, regulated by the state of the pulse must now be resorted to, It possesses greater influence over this highly excited state of the system than any other remedy; It is prompt in its operation; it generally relieves the local pains, it reduces the heat of

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the body, often excites a gentle perspiration, and not unfrequently is succeeded by an undisturbed sleep. — When these beneficial effects are not exhibited, and where nausea, and sickness at the stomach exist, unless forbidden by more urgent circumstances, an emetic of Tartarized Antimony should be given; — and if the bowels are constipated, or if they have exhibited marks of disease in their evacuations, a dose of Calomel alone, or combined with other purgatives should be directed, after the temporary distress and faintness occasioned by the emetic, have subsided. — If after the remedies that have been prescribed, the disease should not be relieved, Venesection may be used again, regulated, as before, by the state of the pulse; Emetics, if indicated, may again be used with advantage, they often reduce the force and frequency of the pulse, relieve the pain in the head, and remove the sickness of the stomach, in any stage of the disease. — If the bowels still maintain their diseased character, the Calomel may be given, and if the desired effect should not be produced, it may be followed by

the exhibition of Castor Oil, or any of the neutral purga-
tive salts, by their operation, the tones of the bowels
are unnatural accumulation of fæcal matter; the dis-
tended condition of the bowels subsided, and by addressing
ourselves in this part we have an additional power over the
pulse. After repeated venesection, if the pulse con-
tinues full and hard, the best results from
the use of Nitrate of Potash alone, or combined with
calomel and tartar emetic. it may be set with more
success by dissolving half an ounce of nitre in half a
pint of water, with the addition of fifty or sixty drops
of Antimonial wine. a table spoonful given every
hour, it possesses great power over the arterial system
and the antimony disposes the skin to gentle moisture

The application of Cold to the skin is the
most means of reducing the pulse, and general heat of
the surface, it may be used in various ways, but the
most convenient method is, by ablution of cold water
with the sponge, or wetted cloths applied to the upper
and lower extremities.

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the next class of remedies that demand our attention are Diaphoretics. Of the different articles in use, the preparations of antimony are preferred. Two grains of Tartar Emetic dissolved in six or eight table spoonsful of water, one given every hour, is a diaphoretic that exerts considerable influence over the cutaneous system. As this quantity proves emetic, the dose may be diminished, or given less frequently. The application of Vapour, by means of cloths dampened with water or spirits, and wrung over hot water kettles, is another effectual means of exciting a diaphoresis.

The use of Blisters may now be resorted to with advantage, they should be applied in general to the extremities, unless called for elsewhere by some local affection.

As one of our last resorts where the disease is of a protracted nature, and where the pulse still continues unsubdued, MERCURY may be used with good effect. It may be given internally, or applied to the body by means of friction, if the bowels are irritable

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and the Medicine should prove cathartic, it may be combined with Opium.— It should be continued until the gums begin to swell, and the mouth becomes sore.

After the reduction of general excitement there often remains a quick, frequent, and irritable pulse to contend with — gentle evacuations from the bowels, the use of Bark, and if there is an inability to sleep, Opium, combined with it, frequently restores the pulse to its natural state, and imparts a tone and strength to the general system.

If in the course of the disease local affections should make their appearance, the general and topical remedies in use should be resorted to, If the Brain should exhibit signs of disease in great watchfulness, sleeplessness, ~~[illegible]~~, pain, or delirium, the application of Cups, Opium, Blisters, to the back of the neck, cold applications and Blisters to the head are to be used. Sinapisms to the feet, are often serviceable where there is much inclination to sleep, and in the incipient stage of delirium.— If great Thirst should

occur it may be relieved by moderately acid drinks, rinsing the mouth with vinegar and water, and draughts of water of a moderate temperature, — To quiet the irritability of the stomach, if it should occur, Lime Water and Milk, Lemonade, Laudanum, Selzer Water, and weak Brandy or Spirit and water should be given.

The Patient during his illness should be kept as quiet as possible: light, and much conversation should be forbidden his appartment; he should have but few attendants; he should be lightly covered with bed-clothes, and his room should be well ventilated; he should not be allowed animal food; he should drink Tamarind Water, Cremor Tartar and water, Barley Water, rendered agreeable by the addition of lime juice and sugar. — When convalescent he may sit up in his bed frequently, previous to the exertion of walking about his chamber; his diet should be light and nourishing; his clothing should be warm; he must avoid exposure of all kinds; exercise in the day time may be allowed, and he should regulate for some

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time, his mode of life by his increasing strength.

Thus have I endeavoured to describe, in a limited manner, some of the Causes, Symptoms, and modes of Cure, not of Bilious Fever alone, but the diseased states of many of the systems of the human body. It has been my aim, in viewing disease to throw aside the name, and attend only to the existing symptoms. — The remedies that have been selected, are those, whose heroic character is universally acknowledged, and whose conflicts with disease are manifest to the last — My conclusions have been drawn, less from the authority of books, than the appearance of Nature; by the former I have often been misled, — the latter has never deceived me. How far they are consonant with Truth, is submitted to more extensive observation to determine. ———